ShippingWorld & Shipbuilder

EDITORIAL INDEX

ShippingWorld & Shipbuilder

EDITORIAL INDEX

- 285 'Atlantic Companion' carries full cargo on maiden voyage
- 145 'Atlantic Companion' the new generation giant' Ro-ro/container ship for ACL
- 92 'Atlantic Universal' The first RTA diesel enters service
- 174 'Barber Tampa' First of three supercarriers for BBS from Hyundai
- 151 Brazilian shipyards ready to compete
- 90 Busier times at Harland and Wolff
- 337 Even more engine efficiency with the new VTR 4A turbocharger from BBC
- 224 Letters to the Editor 285 MacGregor-Navire linkspan for new Rotterdam ro/ro terminal 9 Marine insurance
- 4 Marine Publications International host Christmas Cocktail party
- 220 New ship crane from NEI Clarke Chapman
- 337 New shipbuilding system from TTS 265 Posidonia '84 World's maritime industries
- gather in strength for this exhibition 285 Ro/ro '84 Conference
- 303 'Sea Goddess' -- A superior cruise ship from Wärtsilä
- 'Ship-shape' with Wiik & Hoeglund sliding fenders
- 335 Sperry make work pleasant
- 221 The constant speed generator drive from
- Vickers Engineering
 143 The new MAN-B&W L58/64 four-stroke set to challenge the market
- Sulzer First RTA 38 successfully tested 219 Wärtsilä incorporate modern Schottel-pro-
- pulsion systems for the dredging industry 151 World Port Development Conference
- DIESEL ENGINES (in main propulsion)
- 291 B&W 6L67GFCA in 'Alberto Savarese 291 B&W 6L67GFCA in 'Donna Rita'
- 291 B&W 6L67GFCA in 'Filomena Lembo'
- 155 B&W 4L90GBE in 'Fort Frontenac
- 174 Hyundai/B&W 8L90GB in 'Barber Tampa
- 99 H. Cegielski 6AL20/24 in 'Gideon' 156 Clark-Hawthorn Sulzer 5RLB56 in 'Sunder-
- land Venture'
- 344 Cockerill/B&W 6L90GB in 'Maeterlinck' 343 Cockerill/B&W 6L90GB/E in 'Verhaeren'
- 155 Cockerill/Sulzer 7RND76M in 'Cornelius Verolme'
- 291 Cummins/Viertakt NTA855G in 'Hans Behrens'
- 344 Daihatsu 60VM26 in 'Malaviya Four' 145 Gotaverken/B&W 6L90GBE in 'Atlantic
- Companion' 99 Hanshin 6EL44 in 'Nissan Maru'
- 343 Hitachi Zosen/B&W 7L60MCE in 'Coral
- 228 Hitachi Zosen/MAN B&W 6L67GBE in 'Izumo Reefer'
- 228 Hitachi Zosen/MAN B&W 6L76GBE in Kasuga Reefer'
- Zosen/B&W 5L80GFCA 343 Hitachi 'Maersk Sembawang'

January-June 1984 Volume 180 Numbers 4003-4006

- 99 Hitachi/B&W 7L67GA in 'Mandolyna' 99 Hitachi/B&W 7L55GA in 'Mangal Desai' 344 Hitachi Zosen/B&W 6L67GB in 'Maritime
- Challenge 99 Hitachi B&W 9L45GBE in 'Nissan Miyako
- Maru 344 Hitachi Zosen/B&W 6L67GB in 'Ocean Pearl'
- 228 Hitachi Zosen/MAN B&W 6L67GB in 'Ocean Trader'
- 292 Hitachi/B&W 7L55GA in 'Odyssey
- 228 Hitachi Zosen/MAN B&W 7L55GA in 'Socrates
- 100 Hitachi/B&W 6L67GBE in 'Yasaka'
- 343 Hitachi Zosen/Sulzer 6RTA58 in 'Goldean Alliance
- 344 Hitachi/Sulzer 6RTA58 in 'St. Catheriness'
- 292 Hitachi Zosen/Sulzer type 6RTA58 in Saint Laurent'
- 344 Hitachi/Sulzer 6RTA58 in 'Silver Leader'
- 344 Hitachi/Sulzer 6RTA58 in 'Union Pioneer' 344 Hitachi/Sulzer 6RTA58 in 'Union Peace'
- 343 Hyundai/B&W 7L67GFCA in 'Al Amir' 343 Hyundai/MAN B&W 8L90GB in 'Barber
- Hector' 155 Kincaid-MAN/B&W 6L67GFCA 'Hupeh'
- Krupp Mak 8MU552 in 'Sultan Mahmud
- Babaruddin II' 155 Mak 6M552AK in 'John M'
- 156 Mak 12M453AK in 'Mercandian Prince II' 344 Mak 12M453AK in 'Mercandian Queen II'

- 99 Mak 12M453AK in 'Mercandian Senator' 228 Mak 6M282AK in 'Selectivity' 155 MAN/B&W 5L90GFCA in 'Dagma in 'Dagmar Maersk
- 156 MAN/B&W diesel in 'Laust Maersk' 291 MAN/B&W 4L80GFCA in 'Loftnes' 228 Mirrless Blackstone 8MB276 in 'Charles
- Darwin' 228 Mitsubishi/Sulzer 6RLB66 in 'Lindnes'
- 155 Mitsui-MAN/B&W 6L67GFCA in 'Aton'
- 291 Mitsui/B&W 6L67GBE in 'Century Hope'
- 343 Mitsui/B&W 6L90GB in 'Hyuga Maru' 344 Mitsui/B&W 6L67GFCA in 'Thebes'
- 100 Mitsui/B&W 6L90GB in 'Yard No. S88'
- 344 Mitsui/Stal-Laval AP turbine in 'Senshu
- 343 MWM type TBD408K in 'Hull No. 169'
- 343 MWM type TBD444L8 in 'Navaro' 228 NKK/SEMT Pielstick 10PC4 10PC4V Amorgos
- 155 MKK/SEMT Pielstick 12PC4.2V in 'Bo Johnson'
- 154 NKK/SEMT Pielstick 14PC4V in 'Kokisan Maru'
- 292 Ruston twin screw in 'Simba II'
- 100 Schelde-Sulzer 5RLB90 in 'Nedlloyd van Noort'
- 291 Sulzer 14ZV40/48 in 'Anadyr'
- 92 Sulzer 7TRA58 in 'Atlantic Universal'
- 343 Sulzer type 6RLB66 in 'Hull No. 4400'
- 291 Sulzer 8RLA50 in 'Jacuhy'
- 343 Sulzer in 'Nedlloyd van Diemen' 99 Sulzer in 'Nedlloyd van Neck'
- 100 Sulzer 6RND76M in 'Neuvo Pemex I'

- 61 Sulzer 6RLB66 in 'Tielrode'
- 342 Sumitomo-Sulzer 6RTA58 in 'Aqua City' 227 Sumitomo-Sulzer 6RTA58 in 'Calliroe
- Patronicola' 343 Sumitomo-Sulzer 6RTA68 in 'Hull S-89'
- 99 Sumitomo-Sulzer 5RLB90 in 'Lagoven Ambrosio'
- Sumitomo-Sulzer 5RLB90 in 'Lagoven Morichal'
- 344 Sumitomo-Sulzer 4RLB76 in 'Neptune Alderbaran
- Sumitomo-Sulzer 6RTA58 in 'Olympic
- Miracle' 156 Sumitomo-Sulzer 6RLB66 'Pisces
- Pioneer' 228 Sumitomo-Sulzer 5RLB66 in 'Piscea
- Planter'
- 154 Sumitomo-Sulzer 6RTA58 in 'S-1012' 344 Sumitomo-Sulzer 6RLB66 in 'Sea Pioneer'
- 292 Sumitomo-Sulzer 6RLB66 in 'Tellus'
- 228 Sumitomo-Sulzer 6RLB76 in 'Yard No. S-83
- 100 Sumitomo-Sulzer 6RLB66 in 'Yard No. S-4091'
- 292 Uddevallavarvet/B&W 6L80GFCA
- Philippine' 156 Uddevallavarvet/B&W 4L67GBE
- 'Sletlay' 100 Uddevallavarvet/B&W 6L80GFCA
- Tromaas Wärtsilä/Pielstick 6PC4.2L in 'Royal
- Princess
- Wärtsilä/Sulzer 4RLB90 in 'Hoegh Dene' 155 Wärtsilä/Sulzer 14ZV40/48 in 'Kandalaksha'
- 292 Wärtsilä/Sulzer in 'Nikel'
- Wärtsilä Vasa 12V32 in 'Arahura' Wärtsilä Vasa 12V22B in 'A 'Avraamiy
- Zavenyagin' 303 Wärtsilä Vasa 12V22HF in 'Sea Goddess'
- 156 Wichmann 6AXA in 'Norlandia

HEARD ON THE BALTIC

- 13 Freight market yearly round up 152 Early signs encouraging
- 226 Conditions maintained but rates erratic 290 Benefits shared from a modest improve-
- ment in rates 341 Very modest seasonal improvement held steady
- EQUIPMENT, general references 45 AFGU 2 model 83 freshwater generator for offshore
- Atlas Conco W2213 impact wrench
- 313 Atlas Rasterscan 7600/8600 radar
- 259 Autronica GL-90 level gauging system
- 331 Jaklite 3 lifejacket lights
- 313 Mariner Pathfinder 1210 radar 315 'Navcas' radar plotting aid subsystem
- 259 PACE oil/water separator system 45 TD 2512 Fork lift from Valmet

VIEWPOINT

- 3 British shipbuilding the year ahead 159 Privatisation is it the answer?

MONTH	PAGES
Jan/Feb	1-100
March	101-156
April	157-228
May	229-292
June	293-344

Supplements and features

Scandinavia	
Jan-Feb	27-45
Tankers	
Jan-Feb	59-64
West Germany	
Jan-Feb	71-85
Energy Audit 5	
Electrical Systems & A	utomation
March	133-141
France	
March	109-117

295 Recovery, has it started?

103 Supply vessel dumping

70 Korean shipping firms to merge into 20 231 The Unctad threat

COMMENT

2 Classification standards Economic recovery CSC amendments enter into force UK idle tonnage

102 Lloyd's Register of Shipping carried out 'real time' flooding analysis for ro-ro ships Bupacare for mariners

158 Liner freight rate increases are 'sorely needed' Lloyd's Register of Shipping introduces ad-

ditional requirements for safer ship loading 230 'A severe blow to British shipping' Our views on the news

Save the 'Uganda' 294 Unacceptable returns for Greek owners Japanese increase in ship-scrapping Operation to recover oil from sunken tanker

MARITIME ORGANISATIONS

225 British Rig Owners Association

34 International Maritime Organisation 253 International Tanker Owners Pollution Prevention Federation Ltd

294 Japanese Ministry of Transport

103 Korea Maritime & Port Administration

294 The Salvage Association

YARD BUSINESS

98 Comment & Listing

154 Comment & Listing

227 Comment & Listing

291 Comment & Listing

342 Comment & Listing

Supplements and Features BALTEXPO '84

Where the West and East meet - Slawomir S. Majman

234 The task of Poland's shipyards - To keep up with the world leaders - Andrzej Golebiowski

239 An interview - Minister Jerzy Korzonek

241 Prototype of bulk cargo ship Universal Geophysical vessel from Poland

ENERGY AUDIT 5 — ELECTRICAL SYSTEMS AND AUTOMATION 133 Auxiliary power directly from the main engine — Sulzer Bros. (UK) Ltd

137 Electricity from heavy fuel - thanks to Wärtsilä's CR gear Practical progress in waste heat recovery turbo generator systems - Peter Brotherhood Ltd.

South Korean shipbuilding April 163-173 Heavy lift, towage & salvage April 179-191 Wärtsilä - 150 years of activity April 193-211

Paint, Corrosion & hull preparation

Baltexpo '84 May 233-241

243-251

Naval Review May

Pollution May 253-259 Italy

June 297-299 Navigation & Telecommunication

305-319

Safety at Sea

June 321-328

141 Damatic - a multifunctional marine auto-

mation system

FRANCE

109 French shipbuilding — the empty slipways 111 Normed must rely upon Government help

Alsthom-Atlantique slightly busier 117 Pielstick market in North America

HEAVY LIFT, TOWAGE AND SALVAGE

179 Heavy lift transportation - by Dag Pike

182 Heavy lift operations

187 Dual Walking Beam (DWB) 189 The development of a transport design

191 Salvage

297 Italian shipbuilding - Awaiting governmental reorganisation

299 Conversion instead of newbuildings Conventional yards also suffering

NAVAL REVIEW

243 Export Warships by G. G. Connor O.B.E., C.Eng

247 'HMAS Success'

249 Activities at Litton Middle East and Far East customers for Vospers

251 VT's single role minehunter accepted

NAVIGATION &

TELECOMMUNICATION

305 South America's first Coast Earth Station now in operation Sperry announces new capabilities for vessel

traffic systems 308 Joint venture produces new shipboard management system The Mitsubishi TONAC system

313 New equipment

319 Contracts

PAINT, CORROSION AND HULL PREPARATION

121 Hempel's going through a busy time

The development and performance of abrasion resistant coatings — International Paint Marine Coatings

127 Accelerating sales growth for K P Coat antifoulings — Berger Torpedo

130 New antifouling systems from Jotun

POLLUTION

253 More awareness

Transport Minister welcomes new oil spill clean-up responsibilities

259 Pollution equipment

SHIPS KEY
Blk Cbulk carrier
Cgeneral cargo ship
Cont container ship
LNG liquefied natural gas carrier
LPG liquefied petroleum gas carrier
LASH lighter abroad ship
OBOore/bulk/oil carrier
OCore carrier
O/OC ore/oil carrier
Pass passenger ship
Refrefrigerated cargo ship
Ro/roroll on/roll off ship
Tkrtanker
VLCC very large crude carrier
(other specialist types normally stated
in full)
D diesel
DE diesel-electric
GT gas turbine
Tturbine

SAFETY AT SEA

321 Classification Societies and safety SOLAS Amendments to enter into force Explosion hazards: lessons of the past ignored

TEturbo-starter

325 New rescue boat from Hardings

328 New Coastguard rescue centre at Lee-on-Solent Safety at Sea news

SCANDINAVIAN FEATURE

27 Scandinavian equipment - A worldwide industry

Giant order to Ginge-Kerr Ltd Production of the 1000th Sisu Terminal Systems Terminal Tractor

32 Offshore order for Wärtsilä Activities at Wärtsilä Diesel

35 Interview with Johan Robert Stenius, Vice Managing Director of Wärtsilä Turku Shipyards

39 'Arahura' - new rail/car/passenger ferry from Aalborg Vaerft

45 Scandinavian equipment

SOUTH KOREAN SHIPBUILDING

163 An expanding industry - How do they do

165 Hyundai Heavy Industries - 10 mill dwt of deliveries

169 Daewoo — still expanding 169 Samsung — a variety of designs

170 More expansion at KSEC

171 Naval vessels from Tacoma

173 Shiplifts - a very important part of the South Korean shipbuilding industry

173 Diesel engine manufacture in South Korea

TANKER FEATURE

59 Introduction - Conversion not new building

65 Boelwerf retain their interest in tankers

67 Improved performance and maintenance with reduced costs — by John A. Wood

WÄRTSILÄ - 150 YEARS OF ACTIVITY

193 Wärtsilä - a vast enterprise

195 Tankmar Horn, Chairman of Oy Wärtsilä Ab, gives a few pointers to Wärtsilä's future in this their 150th anniversary year

201 Wärtsilä comes to London 204 Wärtsilä Helsinki Shipyard

211 Wärtsilä Turku Shipyards

WEST GERMANY FEATURE

71 Introduction - Not all suffering

Martin Jansen - One of the busiest West German yards

74 Work required at Flender Werft Future hope for MAN

- 76 MTU Friedrichshafen's series 396 engines now available for submarine propulsion
- 78 Market shares considerably expanded for Deutz DVM 628
- 82 MaK getting through the crisis 85 Busy times at Lohmann + Stolterfoht Deck Cranes in narrow-built version

SHIPOWNERS

- 147 Atlantic Containers Ltd, Europe 91 Atlantic Reefers, Bermuda
- 174 BBS (Barber Blue Sea)
- 61 Exmar, Belgium
- 303 K/S Norske Cruise, Norway
- 287 Navemodal, Brazil 39 New Zealand Railway Corp, N.Z.
- 247 Royal Australian Navy, Australia

SHIPBUILDERS

- 39 Aalborg Vaerft, Denmark 61 Boelwerf N.V., Belgium
- 287 CCN, Brazil
- 174 Hyundai Heavy Industries, Korea 145 Kockums Ab, Sweden
- 92 Mitsubishi Heavy Ind. Ltd., Japan
- 247 Vickers Cockatoo Dockyard Pty Ltd, Australia
- 303 Oy Wärtsilä Ab, Finland

SHIP DESCRIPTIONS

- 287 Amaragy, Brazil, ro/ro-lo/lo 39 Arahura, Denmark, pass 145 Atlantic Companion, Sweden, ro/ro
- 92 Atlantic Universal, Japan, ref.
- 174 Barber Tampa, Korea, supercarrier 247 HMAS Success, Australia, Tkr
- 303 Sea Goddess I, Finland, Pass.
- 61 Tielrode, Belgium, LNG

PEOPLE

- 225 Achee, Emile W., Magnavox Advanced Products & Systems Co.
- 97 Airaksinen, Kari, Valmet Corp.
- 97 Akerberg, Pertti, Valmet Corp
- 97 Ang, B. H. Jotun Nof (S) Pte Ltd, pic 153 Armbruster, Dr. Günter, J. M. Voith GmbH
- 225 Balladur, Henri, Compagnie Generale Maritime
- 340 Ban, Martin van den, August de Meyer
- 153 Barr, Douglas, Furness Withy (Terminals) Ltd
- 225 Belch, Ross, Jebsen Drilling, pic

- 97 Bennett, Alec R, Langham Ind. Ltd, pic 340 Betz, F. Lee, Lykes Bros S/S Co. Inc. 97 Birch, K. H. Elder Dempster Lines 225 Blundell, Paul, Media Processing Co. Ltd,
- 133 Brown, David, Sulzer Bros (UK) Ltd
- 153 Browne, H. J. C. OBE, John Swire & Sons Ltd
- 240 Bumbaugh, Donald R. Lykes Bros S/S Co. Inc
- 289 Carruthers, Ian, Brittany Ferries
- 289 Collins, Robert E., Lykes Bros S/S Co. Inc

- 243 Connor, G. G. OBE, Mycon Mktg Services
- 97 DeWilde, Capt. Jacques, The Canada Line Services Ltd
- 289 Dineen, Denis B. Lykes Bros S/S Co. Inc
- 289 Faafeng, Arne, Ramnäs Bruks A/S 225 Field, Arthur, Dunlop Semtex Contract Services
- 97 Fornell, Glen H. Nicor Marine Inc. 123 French, Dr. D. E., International Paint Marine Coatings, pic 225 Gallop, Peter, Mayflower Container Ter-
- minal Ltd
- Gilbert, John, Peter Brotherhood Ltd 234 Golebiowski. Budownictwo
- Andrzej, Okretowe shipbuilding
- 225 Gaudrille, Pierre (Retd), Compagnie Generale Maritime Greenbury, Reg, North British Shipping
- Ltd 153 Greening, Malcolm, Camper & Nicholsons
- Marine Equip Ltd 97 Gregory, R. P., Elder Dempster Lines 340 Groenendijk, Jacobus, Nedlloyd Group
- 153 Hargreaves, H. N., Hamworthy Eng. Ltd 153 Harrington, Derek, Furness
- (Terminals) Ltd
- 153 Hartigan, Ian, BP Shipping Ltd 225 Hatton, Dr. Les, Merlin Research Co. Ltd
- 97 Heikkila, Veikko, Valmet Corp. 199 Horn, Tankmar, Wärtsilä Ab, pic
- 289 Hotchkiss, Larry M. Cross-County Leasing Ltd, pic
- 340 Houwer, William Mulock, Neddrill
- 153 Ilian, Ronald, BP Shipping Ltd
- 97 Jansen, J. E., Pakhoed Holding NV
- 97 Johansson, Roger, ASEA Ab, 340 Johnston, Kerry St, Overseas Containers Ltd
- 295 Jong, Anko de, Nedlloyd Bulk, pic
- 97 Junnila, Ilkka, Valmet Corp. 239 Jurczakowski, Polish Press Agency
- 97 Karasto, Ahti, Vakmetin Laivateollisuus
- 340 Killeen, Thomas E. Lykes Bros. S/S Co. Ltd
- 239 Korzonek, Jerzy, Polish Maritime Economy Office, pic
- 97 Koskivirta, Veiko, Valmet Corp. 225 Kummerman, Henri (dec'd) MacGregor
- Navire
- 340 Langebald, Ton Van, Neddrill
- 321 Lindfelt, Lars, Swedish Club, pic 97 Lindroos, Harry, Valmet Corp.
- 225 Litton, James, Magnavox Adv. Products &
- Systems Co.
- 153 Lodge, Tony, Stromberg (UK) Ltd 97 Lundahl, Goran, ASEA Transformers 97 Lundberg, Goran, Stal-Laval Turbin AB
- 225 MacMillan, Gordon, Merlin Velocity Pro-
- filing Ltd
- 233 Majman, Slawomir S, Agpol 340 Mattock, Robert B, Lep Transport Ltd
- 153 Midander, Bo, Tor Line Ab,34 Milburn, Peter, Richard & Bisset Pte Ltd,

- 289 Mills, David, ESAB Ltd, pic
- 255 Mitchell, David, Minister UK Govt, pic 289 Munetaka Mori, Lykes Bros S/S Co. Ltd 97 Muhonen, Esko, Valmet Corp.
- 225 Murray, Ian, Lowestoft Container Terminal Ltd

- 289 Neuterman, Jeff, Lykes Bros S/S Co. Inc 97 Niini, Mikko, Valmet Corp 225 Nordvoll, Andreas, Merlin Profilers Ltd 153 Norell, Jan-Erik, Alfa-Laval Marine & Power Engg AB
- 231 Olson, Robert L. LSC, pic 289 Overman, Mel M. Navidyne Corp
- 289 Pasky, James E. Lykes Bros S/S Co. Inc 153 Pearce, Cdr. A. A. (Ex RN Retd), Camper &
- Nicholsons Marine Equipment Ltd 289 Peacock, David J, Racal Energy Resources
- Group 340 Peskens, Leo, Damco G. G. Transport
- 153 Pickering, David, Clark Industries, pic

- 179 Pike, Dag
 97 Pulkkila, Tarmo, Valmet Corp.
 153 Purdy, R. L., Canada Line Services Ltd
 153 Rakennes, Olav, Tor Line Ab
 97 Ranim, Markku, Valmet Corp.
- 153 Roach, Maurice, Furness Withy (Terminals)
- Ltd
- 340 Robbins, Peter, Royal Viking Line 289 Rogalla, Gail, Lykes Bros S/S Co. Inc 97 Romoff, H. M., The Canada Line Services
- Ltd
- 340 Ruys, Bernard, Nedlloyd Group 225 Ryder, James G., Sabah Shipbuilding Repair & Engg Bhd
- 97 Salmensaari, Pekka, Valmet Corp. 340 Shadwell, E. C. Harefield Rubber Co. Ltd
- 225 Shaw, Brian, Furness Withy & Co. Ltd
- 340 Shellenbach, Richard, Lykes Bros. S/S Co. Inc
- 158 Slater, W. B. GCBS Deep Sea Liner Section,
- 35 Stenius, Johan Robert, Wärtsilä Turku
- & 97 Shipyards, pic 199 Sterling, Jeffrey, P & O Steam Navigation
- Co. pic 97 Sykes, D. Elder Dempster Lines
- 289 Tanaka, Takashi, Lykes Bros S/S Co. Inc
- 225 Thomson, William, Ben Line Steamers Ltd 340 Todd, K. L., Babcock-Bristol Ltd 3 Tookey, Richard, GCBS, pic
- 97 Torseke, Lars, ASEA Generation
- 153 Tottenham, Henry L., Wimpey Marine Ltd 153 Valbak Ole, Alfa-Laval Nirex Engineer-
- ing, pic 289 Zeder, Howard B, Lykes Bros S/S Co. Inc
- 225 Walford, Keith, Autronica Ind. Ltd, pic 340 Whittaker, Robert, Lykes Bros S/S Co.
- 97 Wilen, Henrik, Valmetin Laivateollisuus Oy
- 65 Wood, John A., Consultant Marine Engineer, pic

Shipping World & Shipbuilder

EDITORIAL INDEX

Shipping World & Shipbuilder

EDITORIAL INDEX

July-December 1984 Volume 180 Numbers 4006-4010

- 547 Baltexpo '84 Business as usual
- 495 Baltexpo '84 Gdansk once again hosting this international maritime exhibition
- 368 Blue Star reefers the design criteria 465 Blue Star reefers the refrigeration plant
- 605 'English Star' Electric deck cranes from Clarke Chapman meet Blue Star require-
- 663 B&W on the 'English Star'
- 433 DIY Distiller from Denmark
- 603 EEL Marine Torsionmeter
- 455 Greek marine industries
- 411 Hapag-Lloyd set for better balance in 1984 371 Harland and Wolff - the production
- systems 421 Kormarine '84 - A look at some of the companies and the products that will be promoted at this marine exhibition in Busan, Korea
- 663 MAN-B&W programme
- 663 Market confidence in MAN-B&W engines confirmed by statistics
- 627 P&O Yesterday and today Royal Tar to 'Royal Princess
- Perolin and Lovibond join forces with new water test kits
- 551 'Railship II' World's largest car/train ferry from Seebeckwerft AG
- 667 Rigs supplied by B&W
- 475 SMM '84 The oldest-established shipping and marine exhibition commands attention 469 Survival of the fittest - a statement on
- maritime survival training 667 Vickers win stabiliser and steering gear
- contract 469 Warsash College awarded DTp research
- contract 369 Why Harland and Wolff?
- DIESEL ENGINES (in main propulsion) 559 Caterpillar 607hp in 'Cheverton Loadmasters
- 508 GMT C.780.7 in 'Agip Liguria
- 507 GMT C.780.7 in 'Agip Lombardia' 672 GMT A.420.6 in 'Scilla'
- 439 GRSE-MAN K6Z78/155E in 'Lok Pragat'
- 508 Gdansk 9K67GFC in 'B-365' 559 Hitachi/MAN-B&W 6L67GBE in 'Oluf
- Maersk'
- 672 Hitachi/B&W 6L60MCE in 'Sanko Iris'
- 672 Hitachi Zosen Sulzer 6RND76M in 'Jackie' 612 Hitachi Zosen Sulzer 6RTA58 in 'Pacific Defender
- 508 Hyundai-B&W 4L90GBE in 'Archon'
- 519 IHI SEMT-Pielstick 8PC4 in 'Tohkai Maru' 439 Kincaid MAN-B&W 5L67GA in 'Hoegh
- 508 MWM TBD4441 B in 'Navaro'
- 611 MaK 8M552 in 'Beatrice' 612 MaK 6M551 in 'Ledagas S-212'
- 508 MaK 12M453AK in 'Mercandian Duke'

- 672 MaK diesel in 'Mercandian Gigant'
- 551 MaK 8M601 in 'Railship II'
- 508 MaK 6M601 in 'Savannah'
- 440 MaK 6M282AK in 'Selectivity' 440 MaK 8MU552 in 'Sultan Mahmud Bada-
- ruddin II' 440 MaK 6M551 in 'Yard No. S.211'
- 549 MAN-B&W 6L60MCE in 'Australian Reefer'
- 508 MAN-B&W in 'Lars Maersk' 508 MAN-B&W 4L80GFCA in 'Loftnes'
- 408 MAN-B&W 4L90GBE in 'Major Somnath Sharma PVC
- 439 MAN-B&W 7L60MC in 'North Marchioness
- 439 Mitsui MAN-R&W 61 67GFCA in 'Bergen Thistle
- 559 Mitsui B&W 6L90GB in 'Huyga-Maru'
- 439 Mitsui-MAN/B&W in 'Kepbay
- 612 Mitsui-B&W 6L67GA in 'Kepbrave' 440 Mitsui/MAN-B&W 6L67GFCA in 'Saggara'
- 612 Mitsui-B&W 6L60MCE in 'Sanko Antares' 672 Mitsui-B&W 6L60MCE in 'Sanko Deneb'
- 559 NKK-SEMT Pielstick 6PC4-2L in 'Jebsen
- 560 NKK-SEMT Pielstick 14PC-4V in 'Kokisan Maru
- 612 NKK-SEMT Pielstick 10PC4-2V in 'Rosa Blanca
- 508 Ruston diesel generators in 'Challenger
- 559 Schelde-Sulzer 7RND76M in 'Peggy Dow'
- 560 SEMT-Pielstick 10PC2-6V in 'Arita
- 463 Sulzer 7RLB90 in 'American New York'
- 508 Sulzer 5RLB90 in 'Berge Rachel' 439 Sulzer 4RLB90 in 'Hoegh Drake'
- 508 Sulzer 5RLB66 in 'Italia'
- 672 Sulzer 6RLB66 (ERP-I) in 'Merzario Brittania'
- Sulzer 6RTA58 in 'Rich Alliance'
- 508 Sulzer 7RND76M in 'Tineke'
- 508 Sumitomo Sulzer 5RTA58 in 'Aqua City'
- 558 Sumitomo Sulzer 6RTA58 in 'Aqua Garden' 439 Sumitomo Sulzer 6RTA58 in 'Calliroe
- Patronicola 612 Sumitomo Sulzer 6RLB66 in 'Golden Princess'
- 672 Sumitomo Sulzer 6RTA58 in 'Naratha Providence'
- 560 Sumitomo Sulzer 6RLB66 in 'Maratha Prudence'
- 559 Sumitomo Sulzer 6RTA58 in 'Olympic Dignity
- 560 Sumitomo Sulzer 6RTA58 in 'Olympic Miracle' 508 Sunitomo Sulzer 6RTA58 in 'Olympic
- Memory'
- 612 Sumitomo Sulzer 6RLB76 in 'Robert Stove'
- Sumitomo Sulzer 6RLB66 in 'Therassia' Uddevallavarvet B&W 6L80GFCA in Philippine OBO 3
- 560 Uddevallavarvet B&W 6K80GFCA in 'Philippine OBO 4'

- 439 Vasa 12V22HF in 'Leningradskij I' 617 Wärtsilä Pielstick 6PC4.2L in 'Royal Princess
- Wärtsilä-SEMT Pielstick 6PC4.2L-570 in Kihu'
- 559 Wärtsilä Sulzer 4RLB90 in 'Hoegh Dyke'
- 439 Wärtsilä Vasa 9R32 in 'Boris Polevoy' 559 Wärtsilä Vasa 12V22B on 'Kaptitan Mecaik'
- 612 Wärtsilä Vasa in 'Titan I'
- 439 Wichmann 6AXA in 'Johanna'

HEARD ON THE BALTIC

- 435 Another difficult Summer
- 610 Hesitant, but hopeful mood in the drycargo trade
- 504 Market still seasonably quiet
- 670 Optimistic forecasts on Russian imports already having an impact on the market
- 557 Slight upturn in market conditions in recent months
- EQUIPMENT, general references
- 473 Spectrapak water test kits
- 536 Granulock dry powder coupling
- 545 EEL Marine Torsionmeter

VIEWPOINT

- 347 An interview with Mr Stephen Merrett, M.A. FCIL, Chairman of Merrett Syndicates Ltd, Lloyds of London, on the effect the
- Gulf war is having on trade and rates 443 Sealink buy-out Mr James Sherwood 615 The cruise market Is there room for ALL
- the new ships? 511 The current market situation in Japan
- 563 The International Salvage Union speaks out against demands being made by some shipowners for a share of the salvor's remuneration — Mr Rom Scheffer

- COMMENT 346 Recovery or slight pick-up
 - Get STUFT (Ships taken up from trade) Large tankers — at last
 Going public — B&W
 Getting together — Current UK industrial
 - action dominating the news
- Centenary celebrations Mitsui OSK Lines Marginal oilfields Call for papers 442 The Salvage Association Delayed pay-
- ment of fees Maritime strike delay claims Liberia reaffirms Government's Commit-
- ment to the Maritime programme 'Final chance' for UK Government 510 Wrongly timed exhibitions
- Norwegian equipment LSC calls on ITF to end Liberian flag boycotts
 - Baltexpo '84 Business as usual

MONTH	PAGES
July/August	345-440
September	441-508
October	509-560
November	561-612
December	613-672

Supplements a	nd features
UK shipbuilding	
July-August	353-363
Diesel engines	
July-August	373-387
Sulzer Anniversary	
July-August	393-405
China shipbuilding	
September	447-453
Energy Audit — 6	
October	533-545

- 381 Marine applications for ABC engines Dale Electric switch to engine assembly in UK/Swedish marine project Caterpillar announces new marine engine application guidelines Air and watercooled from Deutz
- 387 700 cSt at 50°C for Wärtsilä Vasa 22HF

problems GLC - On the banned waggon

speechless, on shipbuilding

Cruise liner or ice-breaker? Upturn forecast in period charter

562 Campaign against shipyards sell-off Access to classification society records Fundamental point of US Federal law

614 Government has no answer to the problems

They don't give a fig — Irresponsible bombing of merchants ships in the Gulf

Policies Studies Report slated

facing the British Merchant fleet

MARITIME ORGANISATIONS

- 469 College of Maritime Studies, Warsash
- 641 International Maritime Organisation
- 563 International Salvage Union
- 567 International Tanker Owners Pollution Federation

YARD BUSINESS

- 438 Comment & Listing
- 505 Comment & Listing 558 Comment & Listing

Europe

- 611 Comment & Listing
- 671 Comment & Listing

Supplements and Features

B&W SHIPYARD

- 585 What the future holds An interview by Shipping World's editor Alan Thorpe with Mr S. O. Lund, sales director of B&W
- 587 The CPT54E product carrier from Bur-meister & Wain shipyard
- 591 'Marine Ranger' the latest B&W bulk carrier to be delivered

CHINA SHIPBUILDING

- 447 New developments in the Chinese shipbuilding industry by Hong Lun
- 453 Huangpu Shipyard under construction by Wang Zhenhua

CRUISE VESSELS

- 579 Awaiting new deliveries Energy-saving air conditioning for cruise liners
- 582 Evak systems for two new luxury cruisers

DIESEL ENGINES

- 373 MAN combines construction of large diesel engines in MAN-B&W Diesel High durability exhaust valve for PC engine developed
- 375 Production underway at Wärtsilä Power
- MTU Friedrichsafen celebrates its 75th year 378 Perkins absorbs Rolls-Royce diesel engine business New contracts for SWDiesel Projects hit 70 mill Dutch guilders

ENERGY AUDIT — 6

Japanese shipbuilding October

Ice-breaking technology November

Navigation & Telecommunication

Pollution November

Cruise vessels November

B&W Shipyard November

December

Safety at Sea

December

Yugoslavia December

- 533 The correct choice of propeller fixed pitch or controllable pitch?
- 536 Marine transmission equipment from Van der Graaf
- 541 Thyssen Nordseewerke fits first container vessel with Flow Straightening nozzle
- 543 Low-price current aboard using the RCF system from Renk
- New alternator gear by Tacke 545 The EEL Marine Torsionmeter

ICE-BREAKING TECHNOLOGY

- 593 The Russian winter an exhaustive test for ice-going ships An interview by Mr Markku Ranin, sales manager of Valmet with Captain Aleksenko, master of the 'Nizhenvansk'
- 599 Icebreaker 'Shirase' completes maiden vovage Arctic exploration — An assessment of hazards associated with ship collisions and
- icebergs 603 KDG gains further order for Gulf Canada Resources icebreakers

JAPANESE SHIPBUILDING

- 513 Looking at every market
- 515 Large vessels still a significant market for IHI
- 518 'Tohkai Maru' New generation VLCC from IHI
- 519 Container ship orders for Mitsui 520 First Mitsui-Hatlapa ram type steering gear completed Sasebo - Birthplace of the VLCC
- 523 Sail-equipped bulk carrier off on first voyage527 New VLCC order for Mitsubishi
- 529 More specialised vessels from Hitachi Zosen

531 Kawasaki hope for LNG orders

NAVIGATION & TELECOMMUNICATION

641 Navigation & Telecommunication - Continuing advances by the IMO and equipment manufacturers to reduce the amount of risk for vessels at sea

POLLUTION

567 Tanker casualty rate 'Second lowest since The International Tanker Owners Pollution Federation — Mr Peter John Goulandris characterises their work "A Worldwide

Blk Cbulk carrier
Cgeneral cargo ship
Cont container ship
LNG liquefied natural gas carrier
LPG liquefied petroleum gas carrier
LASH lighter abroad ship
OBOore/bulk/oil carrier
OCore carrier
O/OC ore/oil carrier
Pass passenger ship
Refrefrigerated cargo ship
Ro/roroll on/roll off ship
Tkrtanker
VLCC very large crude tanker
(other specialist types normally stated
in full)
D diesel
DE diesel-electric

SHIPS KEY

513-531

567-575

579-582

585-591

593-603

641-647

648-653

655-659

GT gas turbine Tturbine

influence in oil spill contingency planning, clean-up and compensation

571 Krupp oil-spill removal unit undergoes trials in the North Sea Oily water separator from Hamworthy

Engineering 573 Atlas-Danmark replacement order for PEMEX

575 BP Oil's tankers get anti-pollution com-

SAFETY AT SEA

648 Safety at Sea - Ceaseless efforts being made to improve the standards of safety and

SULZER ANNIVERSARY

- 393 Sulzer celebrate 150 years
- 395 Interview for Shipping World & Shipbuilder with Mr Felix van der Schaar, Product Manager, Diesel Engine Division of Sulzer Brothers Ltd, Winterthur
- 399 The Con-Speed drive Soviet confidence confirmed in Sulzerengined SA-15 icebreaking ships First RTA for Finland
- 400 The development of the RTA
- 405 Evergreen changes to RTA engines

UK SHIPBUILDING

- 353 Introduction A need to settle down
- 354 Graham Day, Chief Executive of British Shipbuilders gives his views on the future strategy for the UK shipbuilding industry
- Privatisation and re-organisation
- 361 Training opportunity Last SD 14
 - Rolltite covers for CEGB Colliers
- 363 The Denny ship model experiment tank preserved for posterity

YUGOSLAVIA

- 655 Yugoslavia Orders still coming from East and West Train ferries from Uljanic
- 659 International Paint consignment stocks in
- Yugoslavia

SHIPOWNERS

- 467 Atlantic Container Line, UK
- 368 Blue Star Line Ltd, London
- 518 Daikyo Tanker Co. Ltd, Japan 549 J. Lauritzen A/S, Denmark 551 Reederi H.M. Gehrckens, GmbH, W. Germany
- 408 Shipping Corp. of India
- 459 US Lines, USA
- 617 Oy Wärtsilä Ab, Finland

SHIPBUILDERS

- 459 Daewoo Shipbuilding & Heavy Machinery Ltd, Korea
- 368 Harland and Wolff, U.K.

- 408 & 549 Hyundai Heavy Industries, Korea
- 518 IHI, Japan
- 617 P & O, London
- 467 Swan Hunter Shipyard, U.K. 551 A G 'Weser' W. Germany

SHIP DESCRIPTIONS

- 459 American New York, USA Cont. 467 Atlantic Conveyor, UK ro/ro
- 549 Australian Reefer, Denmark reefer 368 English Star, UK reefer
- 408 Major Somnath Sharma PVC, India, GBO
- 591 Marine Ranger, Liberia, Bulk Carrier 617 Royal Princess, UK, pass
- 551 Railship II, W. Germany Car/train ferry 518 Tohkai Maru, Japan, Tanker

PEOPLE

- 555 Adams, J. K., Deutz Engines Ltd
- 593 Aleksenko, Capt., 'Nizhneyansk', pic
- 609 Anderson, Robert, Cory Ship Towage Ltd
- 555 Andrews, D., Deutz Engines
- 437 Ball, Joe, Appledore Shipbuilders, pic 437 Barr, Jack, Fairey Marine 609 Barrowcliffe, Mel, ESAB Ltd

- 555 Beck, Roberto, Powell, Duffryn Shipping Services
- 437 Bell, James D. B., Ocean Fleets Ltd
- 555 Bennett, Peter, Furness Withy & Co Ltd
- 669 Binns, Graham, Walport Telmar Int. Ltd 555 Blackburn, Ken, Furness Withy & Co Ltd 503 Brady, James M., Lykes Bros. Steamship Co. Inc.
- 669 Brent, Frank (dec'd) Lewis Hawkins Ltd
- 503 Broad, R. Newport News Shipbuilding
- 609 Brown, Dexter H., Seaward International Inc.
- 503 Buxton, Fred, Harlow Electronics Ltd 555 Cammell, John, DoT
- 503 Campbell, E. J., Newport News Shipbuilding
- 503 Cheminant, Peter, GCBS, pic
- 609 Clemmetsen, O. M., Lloyd's Register of Shipping
- 669 Cooper, David, Associated British Ports 503 Cox, J. R. Newport News Shipbuilding
- 609 Cranmer, Steffen, ESAB Ltd 354 Day, Graham, British Shipbuilders, pic
- 437 Dove, R. Capt., Trinity House 437 Dowie, J. F. C. Capt (Retd), Ocean Fleets Ltd

- 669 Duncan, Sir William, Rolls-Royce Ltd
- 669 Escolme, Deborah, Dunlop Marine Safety Products
- 609 Ellis, Michael, The Salvage Association
- 503 Fricks, W. P., Newport News Shipbuilding 609 Forcer, Tim, Qubit Ltd
- 609 Ford, Terry, ESAB Ltd 503 Fell, Mike, Associated British Ports
- 555 Gibbins, Robert, Dunlop Industrial Group 609 Golby, Dr. Paul. Dunlop Marine Safety
- Products 571 Goulandris, Peter John, International Tanker Owners Pollution Federation, pic International
- 503 Graham, J. E., Newport News Shipbuilding 609 Greenland, Robert B., APV Hall International Ltd
- 609 Hanson, Nigel, Clark Industries
- 503 Hanson, Per-Ake (dec'd), McGregor Navire,
- 555 Harrington, Derek, Furness Withy & Co Ltd
- 609 Harrison, Ray, Stubs Welding Ltd, pic
- 669 Hay, John (Ret'd), Walport Ltd

- 437 Hultman, Buster, Brostroms 555 Johnson, Roy, ICHCA 503 Kent, Andrew, Southampton Freeport
- 669 Keir, Jim, Rolls-Royce Ltd
- 555 Keyes, Dudley H., Sperry Corp.
- 437 Kwan, Andy, Perolin Marine, pic 555 Krancioch, John, ESAB Ltd, pic
- 555 Landtman, Christian, Wärtsilä Ab
- 555 Ludorf, E., KHD
- 555 Lunn, James, Brantford International Ltd
- 437 McCann, Robert, Govan Shipbuilders 609 Masson, James M., Dowty Fuel Systems
- 437 Maughan, Michael, J. H., Lloyds
- 555 Meek, Marshall, NMI Ltd
- 555 Montier, David, Brentford International Ltd
- 437 Morse, Mike, Atlantic Container Line Services Ltd
- 669 Nevala, Jonko, Rauma-Repola Co.
- 669 Nieminen, Jorma, Rauma-Repola Co.
- 555 Nickolls, David, Deutz Engines Ltd
- 503 Nolan, Frank W., ICHCA 669 Nugus, Fred, Walport Ltd
- 669 O'Connor, Bernard, Henry Tyrer & Co.
- Ltd. pic 437 Olsson, Christopher, Wallenius Lines
- 503 Overhoff, C. H. R., ICHCA
- 437 Parker, Cameron H., Lithgows Ltd 503 Parker, John, Belfast Freight Ferries Ltd,

- 437 Parry, E. V., Capt., Trinity House
- 669 Perkins, Garry W., Seaward Int. Inc 503 Phillips, W. R., Newport News Shipbuilding
- 503 Pilling, Alan, Shaw Packing Ltd
- 555 Pulley, Tom (Ret'd), Brentford Inter-
- national Ltd
- 437 Rabbitts, Graham, Associated British Ports 599 Ranin, Markku, Valmet, pic 609 Reid, F. Lloyds Register of Shipping
- 669 Reid, William, Brown Brothers
- 437 Richardson, Eric, General Accident Group 503 Roberts, W. A. L. (Tony) (Ret'd), Furness Withy & Co. Ltd
- 669 Robins, Ralph, Rolls-Royce Ltd
- 555 Robinson, Frank, Brentford International Ltd
- 555 Saarikangas, Martin, Wärtsilä Ab
- 437 Salen, Sven. Salenvest AB
- 669 Salokoski, Timo, Rauma-Repola 503 Savas, D. T., Newport News Shipbuilding
- 563 Scheffer, Rom, ISU, pic
- 395 Schaar, Felix van der. Sulzer Bros, pic
- 443 Sherwood, James, Sealink, pic
 - 503 Shovelton, Patrick, GCBS 555 Showell, C. J., Canpac Maritime Ag. Ltd 437 Skaanild, Torben C., BIMCO
- 555 Skully, Robert, ICHCA
- 555 Smith, A. M., J. D. Potter Ltd
- 503 Sorenson, L. R. Jr., Newport News Ship-
- building
- 639 Sterling, J. M., P & O, pic 437 Strachan, Graham R., Scott Lithgow Ltd 609 Suber, Thomas Merritt, Marland Environ-
- mental Systems Inc. 669 Tomek, Allen G., Lykes Bros. Steamship
- Co. 437 Traa, James R., Newport News Ind. Corp.
- 437 Treschow, Michael, Atlas Copco 503 Turner, J. E. Jr., Newport News Shipbuilding
- 437 Tye, Charles, Camrex Ltd
- 503 Valles, Manuel Fernandez, ICHCA
- 503 Walker, John, I Gardner
- 437 Wejke, Per, Atlas Copco 555 Wilson, David, British Aerospace Dynamics
- Group
- 437 Wilson, James, Govan Shipbuilders 555 Wolfram, Ake, Wärtsilä Ab
- 437 Wong, Edward, Perolin Marine
- 437 Wright, G. H. (Bill), Guardian Royal Exchange Group
- 609 Yeo, Jacky, Camrex Ltd

